

U.S. Department of Commerce, Patent and Trademark Office		Application No.: 09/654,643
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Filing date: September 5, 2000
O I P E APR 23 2001 U.S. TRADEMARK OFFICE		Inventors: Pak Shing Chau et al.
LOW-LATENCY EQUALIZATION IN MULTI-LEVEL, MULTI-LINE COMMUNICATION SYSTEMS		Group Art Unit:
		Examiner name:
		Attorney Docket No. RA-19

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## U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date, If Appropriate
DC	AA	5,539,774	7/23/96	Nobakht et al.	375	232	—
II	AB	5,596,439	1/21/97	Dankberg et al.	359	161	—
II	AC	5,608,755	3/4/97	Rakib	375	219	—
II	AD	5,694,424	12/2/97	Ariyavisitakul	375	233	—
II	AE	5,742,591	4/21/98	Himayat et al.	370	286	—
II	AF	5,809,033	9/15/98	Turner et al.	370	522	—
II	AG	5,887,032	3/23/99	Cioffi	375	257	—
II	AH	5,970,088	10/19/99	Chen	375	222	—
II	AI	5,982,741	11/9/99	Ethier	370	201	—
II	AJ	6,009,120	12/28/99	Nobakht	375	229	—
II	AK	6,034,993	3/7/00	Norrel et al.	375	232	—

## Foreign Patent Documents

							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	AL							
	AM							
	AN							

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EB	AO	IEEE Standard 802.3ab-1999, 802.3 Supplement, Local and Metropolitan Area Networks, July 26, 1999.
II	AP	802.3ab, A Tutorial Presentation, 63 pages, undated, believed by applicants to have been presented at an IEEE 802.3 working group meeting in March 1998.
II	AQ	How 1000BASE-T Works, Geoff Thompson, IEEE802.3 Plenary, 13 November 1997, Montreal PQ Canada, 8 pages.
II	AR	A differential Error Reference Adaptive Echo Canceller for Multilevel PAM Line Codes, Perez-Alvarez et al. 0-7803-3192-3/96 ©96 IEEE, pp. 1707-1710.

Examiner	Date Considered
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9/15/01

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office	Application No.: 09/654,643
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APR 23 2001 SC9 LOW-LATENCY EQUALIZATION IN MULTI-LEVEL, MULTI-LINE COMMUNICATION SYSTEMS	Inventors: Pak Shing Chau et al.
	Group Art Unit:
	Examiner name:
	Attorney Docket No. RA-194

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## U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date, If Appropriate
E-S	AA	6,067,319	5/23/00	Copeland	375	232	-
11	AB	6,101,223	8/8/00	Betts	375	261	-
	AC						
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	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

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							Translation
		Document	Date	Country	Class	Subclass	Yes
	AL						
	AM						
	AN						

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

E-S	AO	A Gigabit Transceiver Chip Set for UTP CAT6 Cables in Digital CMOS Technology, Azadet et al., 2000 IEEE International Solid State Circuits Conference, pp. 306-307.
E-S	AP	A Scalable 32Gb/s Parallel Data Transceiver with On-chip Timing Calibration Circuits, Yang et al., 2000 IEEE International Solid State Circuits Conference, pp. 258-259.
11	AQ	Modulation schemes for high bit rate data transmission in the loop plant, URL- <a href="http://www.bib.fh-lippe.de/volltext/dipl/schlegel/chapter4.html">http://www.bib.fh-lippe.de/volltext/dipl/schlegel/chapter4.html</a> , 29 pages, printed 4/19/01.
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Filing date: September 5, 2000

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY  
APPLICANT

Inventors: Pak Shing Chau et al.

Group Art Unit: 2631

LOW-LATENCY EQUALIZATION IN MULTI-LEVEL, MULTI-LINE  
COMMUNICATION SYSTEMS

Examiner name:

Attorney Docket No. RA-194

## U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date, I Appropriate
ZB	AA	5,295,157	03/15/94	Suzuki et al.	375	11	
II	AB	5,917,856	06/29/99	Torsti	375	231	
II	AC	6,061,395	05/09/00	Tonami	375	232	
II	AD	6,222,380	04/24/01	Gerowitz et al.	326	38	
II	AE	09/770,406	08/02/01	Hedburg	—	—	01/29/01
II	AF	09/745,988	08/23/01	Bonneau et al.	—	—	12/21/00
II	AG	09/858,760	09/06/01	Azazzi et al.	—	—	05/15/01
II	AH	09/201,114	09/11/01	Hasegawa et al.	—	—	09/11/01
II	AI	09/795,811	09/13/01	Govindarajan et al.	—	—	09/13/01
Q	AJ						
	AK						.

## Foreign Patent Documents

Translation

		Document	Date	Country	Class	Subclass	Yes	No
	AL							
	AM							
	AN							

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

ZB	AO	Kuczynski et al., "A 1 Mb/s Digital Subscriber Line Transceiver Signal Proccesser", 1993 IEEE International Solid State Circuit Conference.
II	AP	S. D. Cova et al., "Characterization of Individual Weights in Transversal Filters and Application to CCD's" IEEE Journal of Solid-State Circuits, Vol. SC-17, No.6, December 1982.
II	AQ	Dally et al., "Multi-Gigabit Signaling with CMOS", May 12, 1997. -
II	AR	A. Fiedler et al., "A 1.0625Gbps Transceiver with 2x-Oversampling and Transmit Signal Pre-Emphasis", 1997 IEEE International Solid State Circuit Conference and Slideset.

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